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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,586	12/04/2001	Satoko Mita	2895-0131P	6310

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EXAMINER

VJAYAKUMAR, KALLAMBELLA M

ART UNIT PAPER NUMBER

1751

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,586

Applicant(s)

MITA ET AL.

Examiner

Kallambella Vijayakumar

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

- This application is a 371 of PCT/JP00/03582 filed 06/02/2000 and claims the priority of the application in Japan 157604/1999 filed 06/04/1999. Claims 1-14 are currently pending with the application.
- The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A (1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the examiner on form PTO-892 has cited the references and/or the applicants have provided them on PTO-1449, they have not been considered.

Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gan et al (US Patent 6,068,950).

The use of phrase "*for a capacitor*" in the claims have not been treated with patentability. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

The examiner construes this language as "*Intended Use*" and not treated with merits for patentability.

Gan et al teach an electrolyte composition comprising of an alkali metal salt dissolved in a solvent mixture preferably containing propylene carbonate and dimethoxyethane, and an alkyl phosphate including tris(trimethylsilyl) phosphate (Abstract, Col-6, Line-4 to Col-7, line-5) which would meet the composition limitations in claims 1-8. Gan further indicates that the examples of preferred components given are exemplary and not to be construed as limiting. The ratio of solvents and the concentration of alkyl phosphate in Table-1/Col-8 meet the limitations of claim-9. The capacitor, electrical double layer capacitor, an electrode in claims 10-16 are inherent by virtue of the electrochemical cell disclosed by Gan. All the limitations of the instant claims are met.

The reference is anticipatory.

In the alternative that the disclosure by Gan et al be insufficient to arrive at the limitations of the instant claims by the applicants, it would have been obvious to one of ordinary skill in the art to modify the composition of the electrolyte by choosing other phosphate additives and/or solvents per the teachings of Gan to benefit from such a modification, because Gan teaches such variations and suggestive of using various composition based on needs of the desired applications, and with the expectation of reasonable success in arriving at the limitations of the instant claims by the applicants.

2. Claims 1-6 and 8-14 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ue et al (JP 10-241999).

Ue et al teach various silanes coupled organic additives as surface modifiers for the inorganic oxides in the non-aqueous electrolytes for capacitors, use of ethylene-glycol/gamma-butyrolactone as preferred solvents. Ue et al further teach the use of various substituted silanes, onium salts such as 1,2,3,4-tetramethylimidazolium, and solvents such as propylene carbonate (a cyclic carbonic ester) in the formulation of non-aqueous electrolyte for the capacitor and this would meet the limitations of instant claims 1-6, 8, and 11 (Abstract, Claims 3, 6-10, Sections: 0010-0012, 0019-0027). The amount of solvent in the electrolyte per the limitation of instant claim 9 would be inherent. The capacitor, an electric double layer capacitor and an electrode in claims 11-14 would be anticipated by virtue of a capacitor.

The reference is anticipatory.

In the alternative that the disclosure by Ue et al be insufficient to arrive at the limitations of the instant claims it would have been obvious to one of ordinary skill in the art to modify the electrolyte composition of Ue et al by choosing other silane/onium-salts as additives and/or propylene carbonate/cyclic-carbonic-esters as solvents, and vary their amounts in the composition to benefit from improved break-down voltage characteristics, because Ue et al is suggestive of this in the disclosure, and with the expectation of reasonable success in arriving at the limitations of the instant claims by the applicants.

Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mita et al (JP11-087184 ; EP 908,905), Nakanishi et al (US 6,096,234) and Horiuchi et al (JP 11-031526).
- The state of the art is shown by Terahara et al (US 6,379,846), Chen et al (US 2003/0157413) and Shembai et al (US 2003/0215720)
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on M-Th, 07.00 - 16.30 hrs, Alt. Fri: 07.00-15.30 hrs.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMV
02/22/2004


Mark Kopec
Primary Examiner